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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/773,971	01/31/2001	Eric G. Lang	MS#150411.1/40062.86US01	6285
7590	05/02/2006			
Homer L. Knearl Merchant & Gould P.C. P.O. Box 2903 Minneapolis, MN 55402-0903			EXAMINER VU, THANH T	
			ART UNIT 2174	PAPER NUMBER

DATE MAILED: 05/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/773,971	Applicant(s) LANG, ERIC G.	
	Examiner Thanh T. Vu	Art Unit 2174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33-64 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 33-64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This communication is responsive to Amendment, filed 02/21/2006.

Claims 33-64 are pending in this application. In the Amendment, claims 55-64 were amended.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 33-62, and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beaton et al. ("Beaton", U.S. Pat. No. 6037937), and Eftekhari (Pub. No. 2002/0024505).

Per claim 33, Beaton teaches a method for providing a user interface for an electronic device having a housing that includes a display, the method comprising:

providing an input element on the housing wherein the input element is separate from the display (fig. 3A; keypad 330 with navigational control);

displaying information in a foreground of the display (figs. 3A and 3B; display 340); and

displaying a control image in a background of the display, the control image indicating a task to be performed by the electronic device when the control image is activated (fig. 8; col. 5,

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lines 19-26 and lines 40-54). Beaton does not teach associating the control image with the input element so that activation of the input element initiates performance of the task indicated by the control image. However, Eftekhari teaches associating the control image with the input element so that activation of the input element initiates performance of the task indicated by the control image ([0017]). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the teaching of Eftekhari in the invention of Beaton in order to allow user to easily associating a key of a handheld device with a function displayed on the display screen.

Per claim 34, Beaton teaches the method of claim 33 wherein the act of associating the control image with the input element includes positioning the control image in the background of the display proximate the input element (figs. 3A and 10A-10C; navigational control on keypad 330).

Per claim 35, Beaton and Eftekhari teach the method of claim 33 further comprising:
providing a plurality of input elements on the housing separate from the display (Beaton, fig. 3A; navigational control on keypad 330);

displaying a plurality of control images in the background of the display (Beaton, figs. 9A-9C; col. 40-54); and

associating each of the control images with a different one of the plurality of input elements (Eftekhari, [0017]).

Per claim 36, Eftekhari teaches the method of claim 35 wherein the act of associating each of the control images with a different one of the plurality of input elements includes

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positioning each of the control images in the background of the display proximate a separate one of the input elements ([0017]).

Per claim 37, Beaton teaches the method of claim 35 further comprising:

defining a plurality of regions within the background of the display (col. 6, lines 35-43);

and

positioning each of the control images within one of the defined regions (fig. 9A-10C; col. 5, lines 40-54).

Per claim 38, Beaton and Eftekhari teach the method of claim 37 wherein the act of associating each of the control images with a different one of the plurality of input elements includes positioning each of the input elements proximate a separate one of the defined regions (Eftekhari, [0017]; and Beaton, fig. 3A; keypad 330; col. 5, lines 40-54).

Per claim 39, Beaton teaches the method of claim 35 wherein each of the input elements comprise a button positioned on the housing (fig. 3A; keypad 330).

Per claim 40, Beaton teaches the method of claim 39 wherein the electronic device comprises a watch (col. 4, lines 10-14).

Per claim 41, Beaton and Eftekhari teach the method of claim 33 wherein the input element is a joystick, a rocker switch, a rotary dial, or a slide bar, and wherein the input element provides for movement in at least two directions, the method further comprising (Beaton, col. 1, lines 56-64):

displaying a plurality of control images in the background of the display (Beaton, fig. 9A-10C; col. 5, lines 19-26 and lines 40-54); and

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associating each of the control images with a different directional movement of the input element (Eftekhari, [0017]).

Per claim 42, Beaton teaches the method of claim 41 wherein the act of associating each of the control images with a different directional movement of the input element includes:

defining a plurality of regions within the background of the display, each of the regions corresponding to one of the directional movements of the input element (fig. 9A-10C; col. 5, lines 19-26 and lines 40-54); and

positioning each of the control images within one of the defined regions (fig. 9A-10C; col. 5, lines 19-26 and lines 40-54).

Per claim 43, Beaton teaches a method for inputting control signals to an electronic device, the electronic device having a housing and a graphical user interface that includes a display, the method comprising:

providing an input element on the housing wherein the input element is separate from the display (fig. 3A; keypad 330 with navigational control); generating an information screen (fig. 3A and 3B; information screen 340); generating a control screen having at least one control image, the control image indicating a task to be performed by the electronic device when the control image is activated (figs. 9A-10C; col. 5, lines 19-26, and lines 40-54); combining the information screen and the control screen into a composite screen such that the information screen and the control screen appear in an overlapping fashion (figs. 10A-10C; col.5, lines 19-26; col. 6, lines 25-35); and displaying the composite screen in the display (figs. 10A-10C; col.5, lines 19-26; col. 6, lines 25-35).

Beaton does not teach associating the control image with the input element so that activation of the input element initiates performance of the task indicated by the control image. However, Eftekhari teaches associating the control image with the input element so that activation of the input element initiates performance of the task indicated by the control image ([0017]). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the teaching of Eftekhari in the invention of Beaton in order to allow user to easily associating a key of a handheld device with a function displayed on the display screen.

Claim 44 is rejected under the same rationale of claim 34.

Per claim 45, Beaton teaches the method of claim 43 wherein the combining operation includes blending the information screen and the control screen such that the information screen appears in front of the control screen (figs 8 and 10A-10C; col. 5, lines 19-26 and col. 6, lines 26-35).

Per claim 46, Beaton teaches the method of claim 43 wherein the combining operation includes blending the information screen and the control screen such that the control screen appears in front of the information screen (figs 8 and 10A-10C; col. 5, lines 19-26 and col. 6, lines 26-35).

Claims 47-54 are rejected under the same rationale as claims 35-42 respectively.

Claim 55 is rejected under the same rationale as claim 43.

Per claim 56, Beaton teaches the computer readable medium of claim 55 wherein the computer process further comprises receiving an activation signal from the input element (fig. 4 and 5; col. 6, lines 51-63).

Per claim 57, Beaton teaches the computer readable medium of claim 56 wherein the computer process further comprises performing the task indicated by the control image associated with the input element after the activation signal is received (fig. 4 and 5; col. 6, lines 51-63).

Claims 58 and 59 are rejected under the same rationale as claims 44 and 46 respectively.

Claims 60-62 are rejected under the same rationale as claims 47, 49, and 50 respectively.

Claim 64 is rejected under the same rationale as claim 52.

Claims 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beaton et al. ("Beaton", U.S. Pat. No. 6037937), Eftekhari (Pub. No. 2002/0024505), and Hoeksma (U.S. Pat. No. 6,271,835).

Per claim 63, Beaton and Eftekhari teach the computer readable medium of claim 62, but do not teach the computer process further comprises loading a character set, the character set including a plurality of individual characters; dividing the character set into character subsets; representing each of the character subsets as a separate control image in the control screen; receiving an activation signal from one of the input elements representing a selection of one of the character subsets; narrowing a range of the individual characters within the character set to the selected character subset; and repeating the dividing, representing, receiving, and narrowing operations until a selection of one of the individual characters is made.

However, Hoeksman teaches the computer process further comprises loading a character set, the character set including a plurality of individual characters (fig. 2; col. 2, lines 24-48; and col. 4,

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lines 11-26); dividing the character set into character subsets (fig. 2; col. 2, lines 24-48; and col. 4, lines 11-26); representing each of the character subsets as a separate control image in the control screen (fig. 2; col. 2, lines 24-48; and col. 4, lines 11-26); receiving an activation signal from one of the input elements representing a selection of one of the character subsets; narrowing a range of the individual characters within the character set to the selected character subset (fig. 2; col. 2, lines 24-48; and col. 4, lines 11-26); and repeating the dividing, representing, receiving, and narrowing operations until a selection of one of the individual characters is made (fig. 2; col. 2, lines 24-48; and col. 4, lines 11-26). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the teaching of Hoeksma in the invention of Beaton and Eftekhari because it provides users with a clear and intuitive method of data input in an area of limited space.

Response to Arguments

Applicants' arguments in the Amendment have been fully considered but are not persuasive.

Applicant's primary argument is that "Beaton only teach the user of the touch screen to manipulate background control images, while Eftekhari merely teaches the use of color codes input keys to activate different links contained within the foreground of the display". Therefore, Beaton and Eftekhari fail to teach associating the control image with the input element so that activation of the input element initiates performance of the task indicated by the control image

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on

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combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In this case, Beaton teaches the use of the touch screen to control different functions on the display by touching the graphical arrows displayed on the display screen (see fig. 8 and 9A-9C, col. 5, lines 41-49). In addition, Beaton also teaches input buttons on the housing of the device, but does not teach associating the input buttons with functions the display. However, Eftekhari teaches the matching each of color input button of a handheld device with a function on the display (see [0017]). Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the teaching of Eftekhari in the invention of Beaton in order to allow a user to easily associating a key of a handheld device with a function displayed on the display screen. Thus, the combination of Beaton and Eftekhari read on the claim language of associating the control image with the input element so that activation of the input element initiates performance of the task indicated by the control image.

Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh T. Vu whose telephone number is (571) 272-4073. The examiner can normally be reached on Mon-Thur and every other Fri 7:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine L. Kincaid can be reached on (571) 272-4063. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

T. Vu

Kristine Kincaid
KRISTINE KINCAID
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100